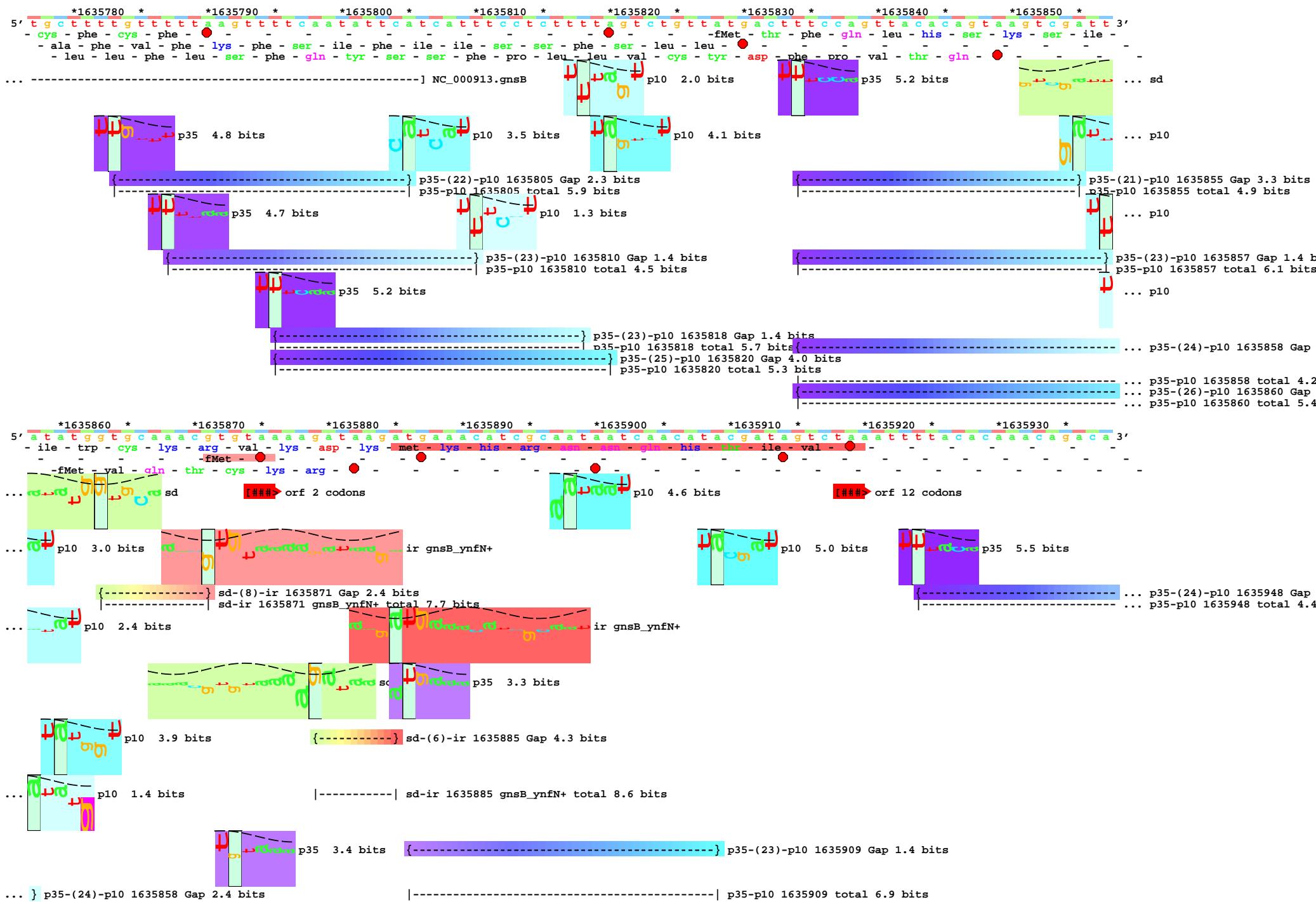


- 1 -
piece 1, NC_000913, gnsB_ynfN+, config: linear, direction: +, begin: 1635777, end: 1635997



This diagram illustrates the assembly of a bacterial ribosome, specifically the 30S subunit, showing the interaction between the p35 (5S rRNA) and p10 (16S rRNA) precursors and their associated tRNAs.

- Top Panel:** Shows the mature 30S subunit structure with rRNA components p35-(25)-p10 (16S rRNA) and p35-p10 (5S rRNA). The total length is 4.0 bits.
- Middle Panel:** Shows the p35-(26)-p10 intermediate, which includes a gap of 3.7 bits. The total length is 5.4 bits.
- Bottom Panel:** Shows the p35-(24)-p10 intermediate, which includes a gap of 2.4 bits. The total length is 4.4 bits.
- Assembly Pathway:** The diagram shows the sequential addition of rRNA precursors and tRNAs (labeled *1635940 through *1635990) along the 5' to 3' axis. The p35 precursor is shown in purple, and the p10 precursor is shown in blue. Red dots indicate specific assembly points or mutations.
- Annotations:** Labels include "fMet" (formylmethionine), "gln" (glutamine), and "p10 1.3 bits", "p35 5.3 bits", "p10 4.5 bits".
- Reference:** The sequence is aligned with the NC_000913.yrnf genome.